



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/510,017

08/26/2005

Werner Mantele

30408/40489

4202

4743

7590

12/03/2009

MARSHALL, GERSTEIN & BORUN LLP  
233 SOUTH WACKER DRIVE  
6300 SEARS TOWER  
CHICAGO, IL 60606-6357

EXAMINER

GAWORECKI, MARK R

ART UNIT

PAPER NUMBER

2884

MAIL DATE

DELIVERY MODE

12/03/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,017	<b>Applicant(s)</b> MANTELE ET AL.	
	<b>Examiner</b> MARK R. GAWORECKI	<b>Art Unit</b> 2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-13,15-18,20-33,35,44-46,51,52,60-65 and 71-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5,7-13,15-18,20-23,25-33,35,51,52,61-65,71,72 and 75 is/are allowed.
- 6) ☒ Claim(s) 24,44-46,60,73 and 74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/24/2009</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 24 September 2009 has been entered.

2. Claims 1-3, 5, 7-13, 15-18, 20-33, 35, 44-46, 51, 52, 60-65 and 71-75 are pending.

### ***Drawings***

3. The replacement drawings were received on 24 September 2009. These drawings are not entered, as they are not properly labeled as "replacement sheets". The following is a quotation of 37 CFR 1.121(d), regarding submission of amended drawings:

4. "One or more application drawings shall be amended in the following manner: Any changes to an application drawing must be in compliance with § 1.84 and *must be submitted on a replacement sheet of drawings which shall be an attachment to the amendment document and, in the top margin, labeled "Replacement Sheet"*. Any replacement sheet of drawings shall include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is amended. Any new sheet

Art Unit: 2884

of drawings containing an additional figure must be labeled in the top margin as "New Sheet". All changes to the drawings shall be explained, in detail, in either the drawing amendment or remarks section of the amendment paper."

5. In view of the non-entered replacement drawing, the drawings are objected to because Figure 3 contains reference numeral "5" instead of "5a". Further, the currently entered drawings (filed 1 October 2004) are dark, grainy, and include handwritten and/or unclear reference numerals. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Examiner's Amendment***

It is noted that an Examiner's Amendment to claim 1 was entered on 24 June 2009. As no new claim set was submitted with the submission filed on 24 September 2009, the Examiner is treating the previously submitted claims from 11 June 2009, as amended by said Examiner's Amendment.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 44-46, 60, 73, and 74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte*

Art Unit: 2884

*Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 44 recites the broad recitation “Cannula”, and the claim also recites “especially a stent” which is the narrower statement of the range/limitation.

Claims 45, 46, 60, 73, and 74 are rejected for reasons of dependency.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki *et al.* (5,905,030), or Okazaki in view of Lilienfeld-Toal (6,484,044).

With respect to claim 24, Okazaki discloses an infrared measuring device (abstract), comprising at least one infrared light source (3); at least one ATR body, which has two plane, essentially parallel boundary surface and is transparent or partially transparent to measuring radiation (28) and has a refractive index which is higher than that of the medium to be investigated (40), wherein the light can undergo attenuated total reflection at least six times on at least one of the surfaces (28, Fig. 1); and a computer-aided evaluation unit (arithmetic/control computer, 7). With respect to the limitation in which the radiation is middle infrared radiation, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use any suitable infrared range, since it has been held that where the general conditions of a

Art Unit: 2884

claim are disclosed in the prior art, discovering the optimum or workable ranged involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to the photoacoustic detector limitation, while Okazaki does not disclose the use of a photoacoustic detector. However, Lilienfeld-Toal discloses a photoacoustic detector for use in an infrared measurement system, for analysis of constituents in aqueous environments. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a photoacoustic detector, which is advantageous in the detection of substances in targets with high light absorption (column 2, lines 34-39).

***Allowable Subject Matter***

11. Claims 1-3, 5, 7-13, 15-18, 20-23, 25-33, 35, 51, 52, 61-65, 71, 72 and 75 are allowed.
12. Claims 44-46, 60, 73, and 74 are rejected under 35 U.S.C. 112, second paragraph, but would be allowable if rewritten to overcome the above rejection.
13. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-3, 5, 7-13, 15-18, 20-23, 25-33, 35, 44-46, 51, 52, 60-65, 71-75 are allowable for reasons of record as set forth by the Examiner in the communication mailed on 24 June 2009. Further, the newly cited prior art of record fails to show the combination of an attenuated total reflection (ATR) body, used in combination with at least one quantum cascade laser for the measurements of a particular constituent.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK R. GAWORECKI whose telephone number is (571)272-8540. The examiner can normally be reached on Tuesday through Friday, 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David P. Porta/  
Supervisory Patent Examiner, Art  
Unit 2884

/M. R. G./  
Examiner, Art Unit 2884  
25 November 2009